

“Energy Efficiency: how to make it sustainable”

The way forward for Energy Efficiency in Industries

European Energy Challenge and Energy Integration

The role of Energy Management and related standards

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CTIwww.cti2000.it**



ASSOLOMBARDA

The Union is facing unprecedented challenges:

increased dependence on energy imports and scarce energy resources

need to limit climate change

need to overcome the economic crisis



Energy efficiency is a valuable means to address these challenges.

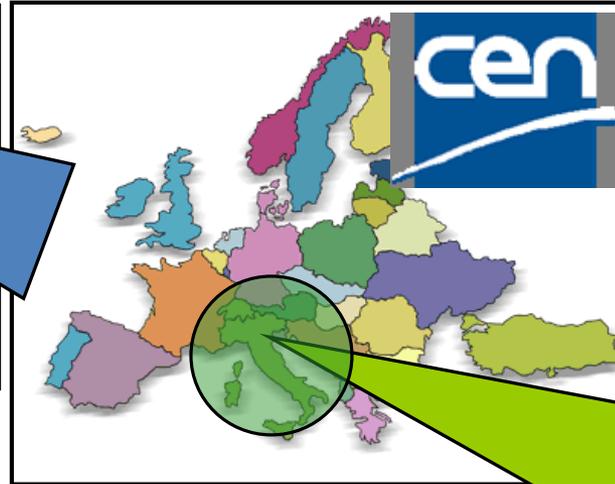
**Directive
2012/27/EU
EED**

Shifting to a more energy-efficient economy should improve the competitiveness of industry in the Union.

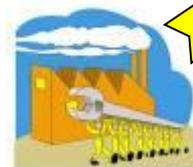
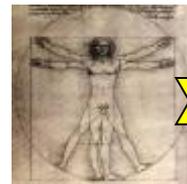
The more «Single» the EU market is, ...



... the more competitiveness and sustainability should be based on energy efficiency



Italian System
UNI
+
7 Federate bodies



National
Standardization
Body



Comitato Termotecnico Italiano

CIG
CUNA
UNICHIM
UNIPLAST
UNSIDER
UNINFO

- **To assure reliability of cash flow** for energy efficiency projects
- **To assure investors about the return of investment** with an accurate risk assessment



.... for energy efficiency sustainability.

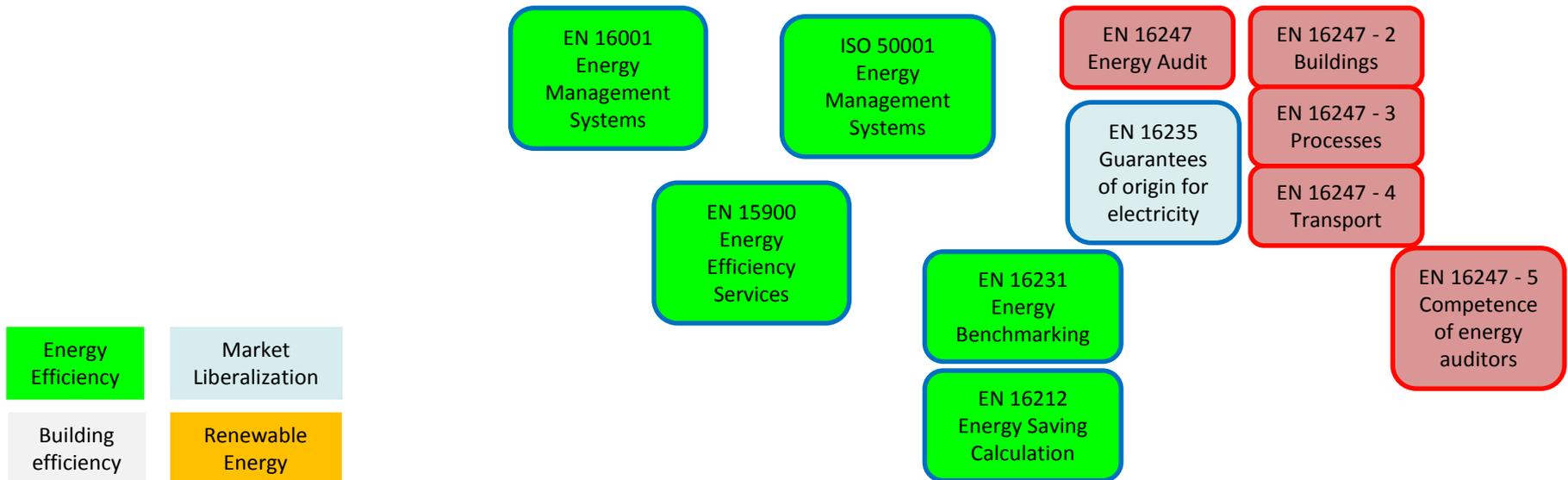
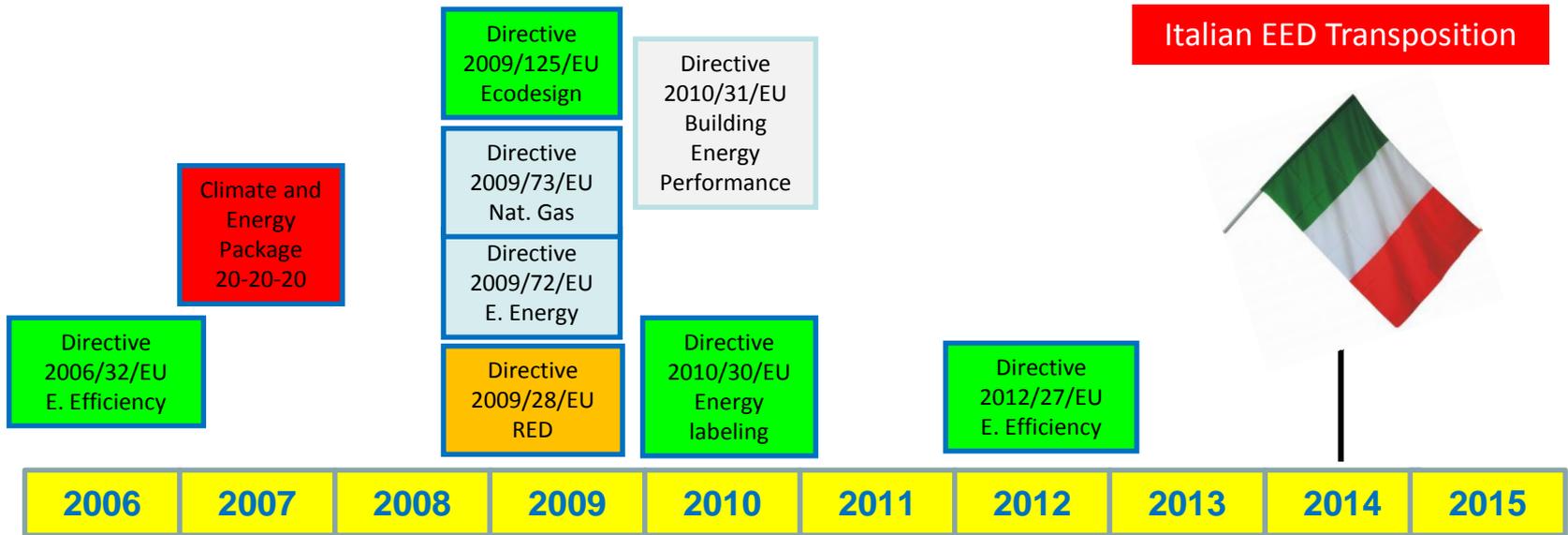
- **internal risks** through best practices and qualified competences
- **external risks** through flexibility in adapting to market changes



*.... for energy efficiency
sustainability.*

Several standardization tools are available...

Italian EED Transposition



Qualified tools for energy efficiency

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

ICS 27.010

EN ISO 50001

October 2011

Supersedes EN 18001:2009

English version

Energy management systems - Requirements with guidance for use (ISO 50001:2011)

Energienagementsysteme - Anforderungen mit Anleitung zur Anwendung (ISO 50001:2011)

This European Standard was approved by CEN and CENELEC on 25 October 2011. CEN and CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN/CENELEC Management Centre or to any CEN and CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN and CENELEC member has the same status as the official versions.

CEN and CENELEC members are the national standards bodies and national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

ICS 03.120.10; 27.010; 91.140.01

EN 16247-2

May 2014

English version

Energy audits - Part 2: Buildings

Audits énergétiques - Partie 2 : Bâtiments

Energieaudits - Teil 2: Gebäude

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

ICS 03.120.10; 27.010

EN 16247-3

May 2014

English version

Part 3: Processes

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

ICS 03.120.10; 03.120.20; 27.010

EN 16247-5

May 2015

English version

Energy audits - Part 5: Competence of energy auditors

EN 16247-4

May 2014

English version

Energy audits - Part 4: Transport

Energieaudits - Teil 4: Transport

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

ICS 03.120.10; 27.010; 55.020

EN 15900

May 2010

English version

Energy efficiency services - Definitions and requirements

Services d'efficacité énergétique - Définitions et exigences

Energieeffizienz-Dienstleistungen - Definitionen und Anforderungen

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

ICS 01.040.03; 01.040.91; 03.080.10; 91.120.10

EN 15900

May 2010

English version

Energy efficiency services - Definitions and requirements

Services d'efficacité énergétique - Définitions et exigences

Energieeffizienz-Dienstleistungen - Definitionen und Anforderungen

EN ISO 50001 «Energy management system»

EN 16247-3 «Energy audit of processes»

EN 16247-5 «Competences of energy auditor»

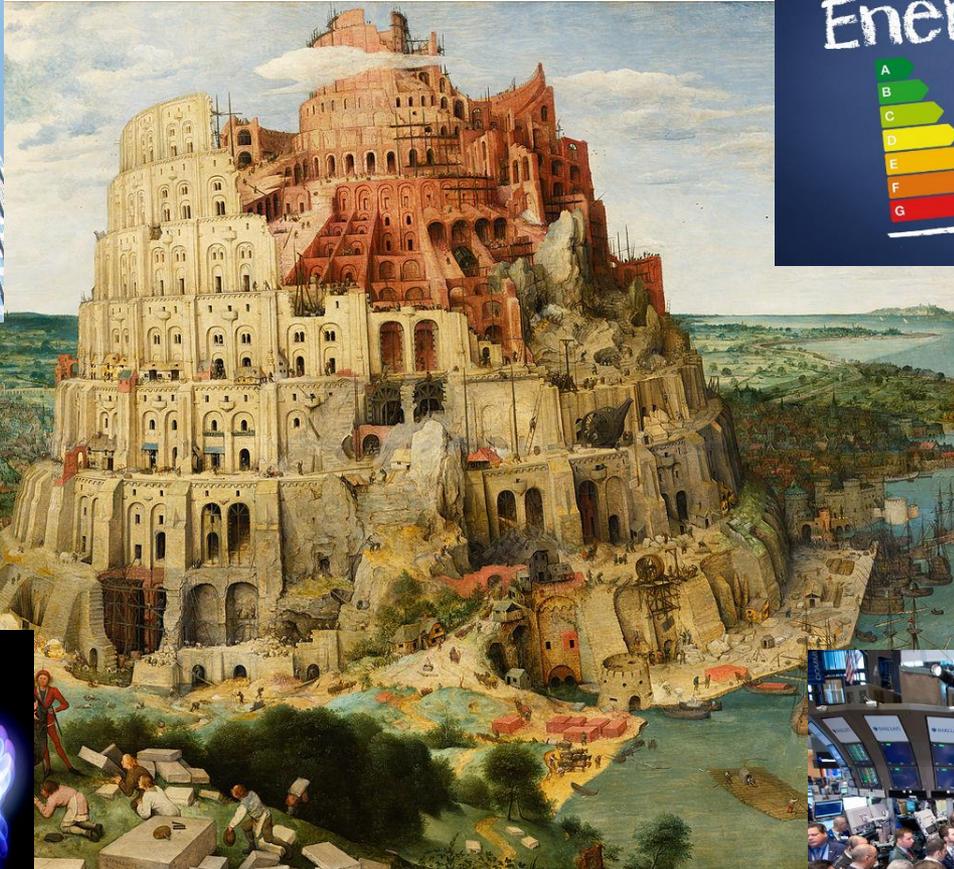


UNI CEI 11.339 “Competences of EGE”

Esperto in Gestione dell’Energia Certified Energy Manager



Common language on best practices



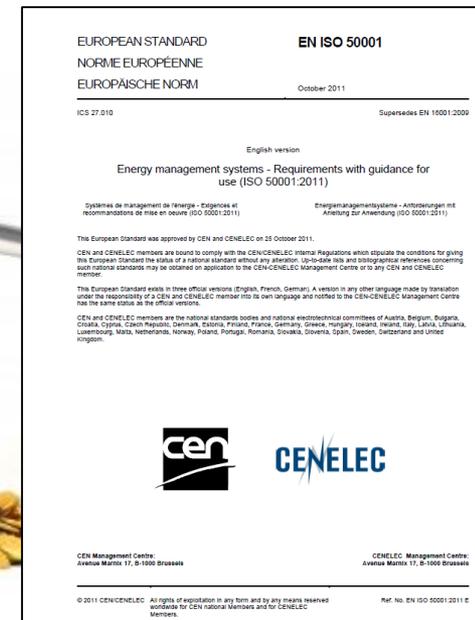
- harmonization of products and services making industry **more efficient** and **breaking down barriers** to international trade
- achievement of better levels of **performance** and **reliability**
- an help for companies in **tackling** some of the most demanding **challenges** of modern business.

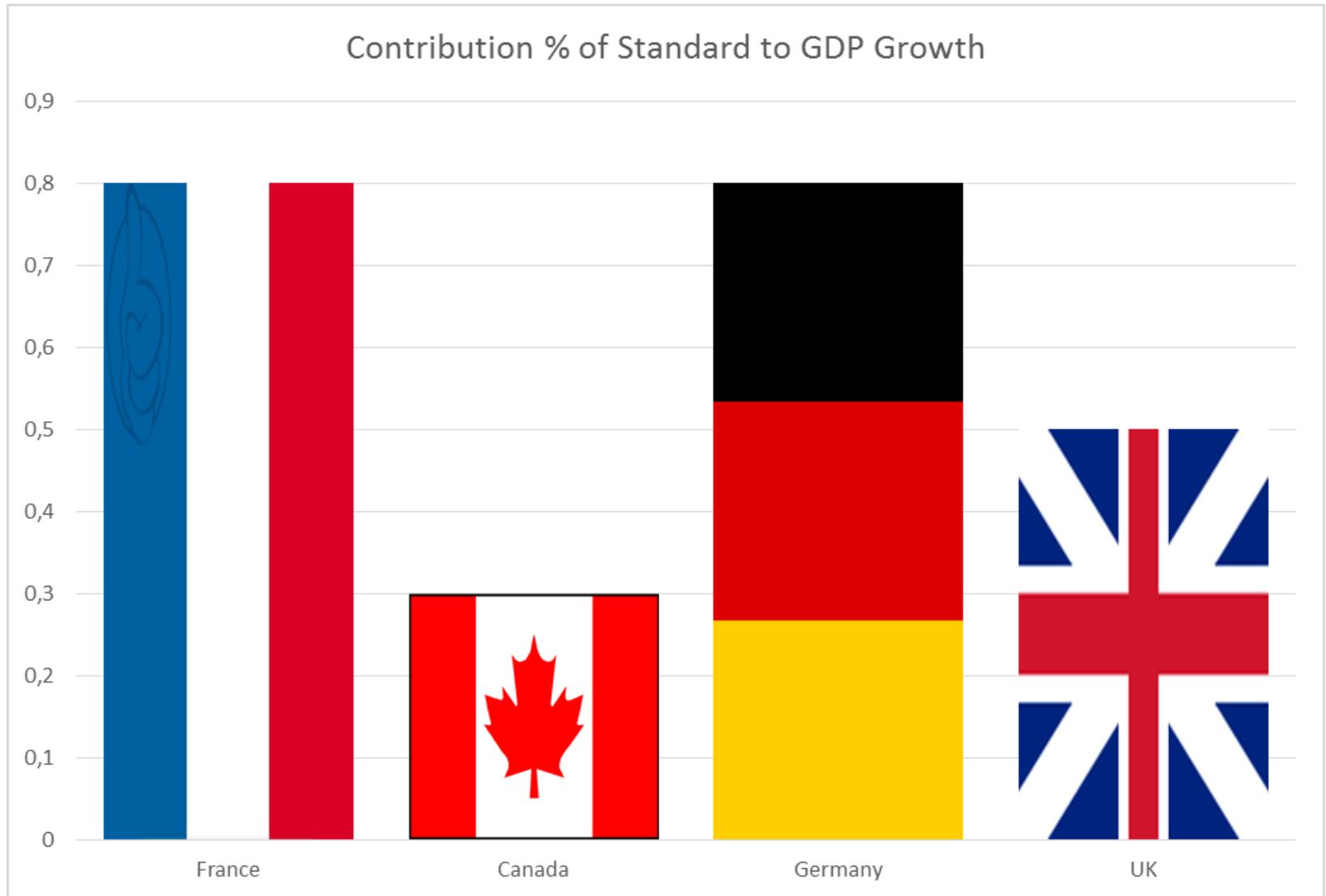


Taken from www.iso.org and www.cen.eu

... **standards** on energy management and related services **are tools for sustainability** since:

- increase **awareness on energy consumption and use**
- assure **a better management of risk** within the organization
- **increase confidence** by PA (subsidies and incentive) and financial institutions (funding)





Taken from «The Economic Contribution of Standards to the UK Economy – BSI June 2015»

Standards are consensual tools for innovators, dreamers and doers!!!

Provided that, we are **still working** for energy efficiency:

- making standards as **simple** as possible
- spreading a **wider common language** for energy efficiency
- supporting an easier **adoption of innovation and technologies**
- looking at the future: **internet of things** for energy efficiency
- **joining new stakeholders** up to now not aware of the power of standards